ecology and environment, inc.

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International Specialists in the Environmental Sciences

March 21, 1980

Commanding Officer
Marine Safety Office
Patrick V. McNamara Bldg.
Room 550
477 Michigan Avenue
Detroit, MI 48226

Dear Ensign Stannus:

I have reviewed the Canton Analytical Laboratory results of our sediment sampling effort on the Detroit River. The analysis disclosed that a significant amount of mercury was present in the river sediments collected downstream from the bulkhead (site 3-1). No mercury was detected in the sediment samples taken by the Firestone plant (site 1-1).

If our sediment analysis is reviewed in conjunction with the January 14, 1980, sample analysis, high mercury levels would be found in an area encompassing sites 2-1, 7-1, 8-1, 11-1, 12-1, 13-1 and 17-1. This area, as indicated on the attached map, appears as a plume within the fill area. It is assumed that the area from the bulkhead to sampling site 3-1 has similar high concentrations of mercury.
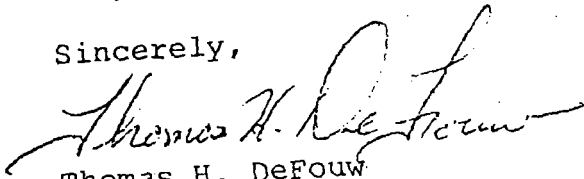
Our interpretation supports the Smith, Hinchman and Grylls report which also indicated that mercury was present in river sediments.

It is our conclusion that, pending additional sample analysis, the source of the mercury is the Federal Marine site. Any future sampling of the area should include analysis for mercury since mercury appears to be the traceable heavy metal in this situation.

It is recommended that an intensive sampling program be undertaken along the bulkhead to site 4-1 to determine the area of leachate. Wells should be placed in the landfill along the river to determine the amount of mercury entering the Detroit River from the fill.
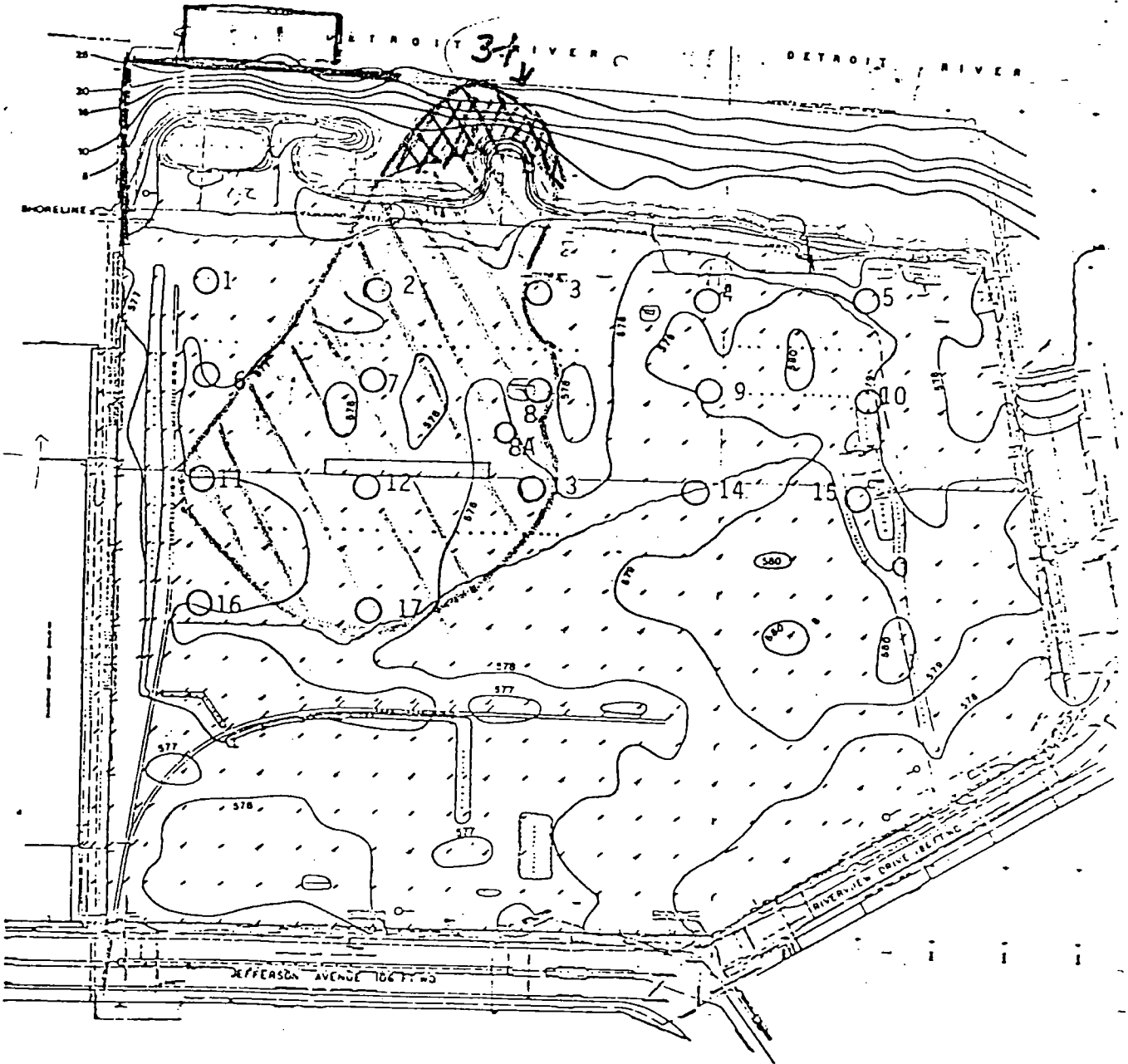
recycled paper

If our services are needed, we are available through EPA Region
V by contacting Charles Castle.

Sincerely,

Thomas H. DeFouw
TAT-Chemist

cc: EPA Region V
Encl: (3)

Topography
and
River Bottom Contours

SAMPLING LOCATIONS

▨ Area where $Hg > 2mg/l$

▨ Area where $Hg > 3.2 mg/kg$ in Sediments.